UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,231	08/31/2006	Ulrike Schulz	P29301	2144
	7590 10/27/201 & BERNSTEIN, P.L.0		EXAMINER	
1950 ROLAND	CLARKE PLACE		LEA, CHRISTOPHER RAYMOND	
RESTON, VA 20191			ART UNIT	PAPER NUMBER
			1613	
			NOTIFICATION DATE	DELIVERY MODE
			10/27/2011	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com pto@gbpatent.com



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/574,231 Filing Date: August 31, 2006 Appellant(s): SCHULZ ET AL.

Heribert F. Muensterer For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed September 16, 2011, appealing from the Office action mailed February 18, 2011.

# (1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

# (2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

Appeal briefs, Examiner's answers, and Reply briefs have been filed in the copending applications 10/574,219 and 11/586,585 which have similar subject matter and share a common assignee and inventor(s) with the instant application.

# (3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 34-57 are pending and have been rejected in the Final Office Action dated February 18, 2011.

# (4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

# (5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

Art Unit: 1613

#### (6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) as being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

#### WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. The provisional rejection of claims 34-36 & 38-45 on the ground of nonstatutory obviousness-type double patenting over copending Application No. 10/574,230 has been withdrawn in view of the abandonment of the copending application.

#### (7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

# (8) Evidence Relied Upon

GB 2280111	Williams et al.	1-1995
US 5,776,494	Guskey et al.	7-1998
US 2003/0059396	Bhakoo et al.	3-2003
US 6,593,283	Hei et al.	7-2003

Art Unit: 1613

# (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 49, 50, & 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams et al. (GB 2280111, provided by appellant on IDS dated November 30, 2006).

Williams et al. disclose a clear gel containing 20% aluminum chlorohydrex (a combination of aluminum chlorohydrate and propylene glycol), 0.5% lactic acid (an  $\alpha$ -hydroxycarboxylic acid), and water (example 9, page 17, lines 4-26). Since the composition is taught as a gel, the antiperspirant, acid, and water are present in a ratio that resulted in gelling.

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1613

4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Appellant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 34-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guskey et al. (US Patent 5,776,494) in view of Bhakoo et al. (US PreGrant Publication 2003/0059396) and Hei et al. (US Patent 6,593,283).

# Appellant claims

Appellant claims a cosmetic or dermatological formulation which is transparent and comprises an antiperspirant, an  $\alpha$ -hydroxycarboxylic acid (in some embodiments mandelic acid) and water.

Page 7

Guskey et al. teach, as a whole, gel carriers for topical skin active agents (abstract & column 2, lines 9-30).

(MPEP 2141.01)

Claim 34-37, 49-52, & 55: Guskey et al. teach a topical pharmaceutical composition comprising at least one active agent, a gelling agent, and an anhydrous solvent (column 2, lines 35 through column 3, line 29). Among the active agents, Guskey et al. teach aluminum and aluminum-zirconium chlorohydrate (column 7, lines 30-45) and mandelic acid (column 5, line 48) and further teaches that mixtures of active agents may be used (column 7, lines 46-7). Though Guskey et al. teach that an anhydrous solvent is used, Guskey et al. also teach that the invention may contain up to 5% water (column 10, lines 29-35). As to the limitation that the composition be transparent, compositions of identical chemical composition must have identical properties. In addition, Guskey et al. teach that the invention leaves a reduced visible residue (column 2, line 19-24).

Claims 38-45, 53, 54, & 56: Guskey et al. teach that the active agents in the composition are present in a safe and effective amount (column 2, lines 35-36). It is certainly within the purview of the skilled artisan to determine this safe and effective amount, which will necessarily be different depending on the different active agent or agents selected, through routine experimentation. Similarly this determination will establish the ratio of the different active agents. In the absence of factually-supported objective evidence demonstrating the criticality of the claimed ranges of component

percentage and active agent ratio, it would have been obvious to determine these ratios empirically.

Claim 46: Guskey et al. teach that deodorant active agents are suitable for use in the composition of the invention (column 7, lines 7-29).

Claims 47, 48, & 57: As to the claimed presence of a defined yield point and form of a hydrogel, where the claimed and prior art products are substantially identical in structure or composition, or are produced by substantially identical processes, a *prima facie* case of obviousness has been established. Further, The U.S. Patent Office is not equipped with analytical instruments to test prior art compositions for the infinite number of ways that a subsequent appellant may present previously unmeasured characteristics. When as here, the prior art appears to contain the exact same ingredients and appellant's own disclosure supports the suitability of the prior art composition as the inventive composition component, the burden is properly shifted to appellant to show otherwise. Absent evidence to the contrary, the prior art composition must possess the claimed presence of a defined yield point and form of a hydrogel since it is substantially identical to the claimed composition (See MPEP § 2112.01).

# Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

The difference between the teachings of Guskey et al. and the instant claims is that Guskey et al. do not exemplify an embodiment that contains the specific active agents in the claimed ratios.

# Finding of *prima facie* obviousness Rationale and Motivation (MPEP 2142-2143)

It would have been prima facie obvious to one of ordinary skill in the art at the time the claimed invention was made to formulate a composition containing an antiperspirant and mandelic acid as taught by Guskey et al. and produce the instant invention. The skilled artisan would have been motivated to make a topically-applied skin-treating composition with antiperspirant agents and mandelic acid because Guskey et al. teaching mandelic acid and antiperspirant agents are suitable for use as active agents in a topical composition and suggests employing mixtures of active agents. Reading a list and selecting a known compound to meet known requirements is no more ingenious than selecting the last piece to put in the last opening in a jig-saw puzzle (see MPEP § 2144.07). Additionally, the skilled artisan would have been motivated to use mandelic acid because Bhakoo et al. teach that malodor is the result of microorganisms that biotransform sweat to produce volatile odoriferous compounds (paragraph 2) and that generally deodorants work through an antimicrobial ability to decrease the population of microorganisms (paragraph 6). Since Hei et al. teach that mandelic acid possess antimicrobial properties (column 10, lines 22-63), it would have been obvious to use mandelic acid as a deodorant active agent in combination with an antiperspirant active agent in the composition of Guskey et al.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in formulating a composition containing an antiperspirant and mandelic acid as taught by Guskey et al. and producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

In light of the forgoing discussion, one of ordinary skill in the art would have concluded that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

# **Double Patenting**

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 34-36, 38-45, & 47 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 46-56 & 64 of copending Application No. 10/574,219 (the '219 application). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '219 application are species of the instant claims differing only in the claims of the '219 application more narrowly defining the antiperspirant ingredient. Since the claims of the '219 application are in a species relation to the instant claims, the instant claims are anticipated by the claims of the '219 application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 34-36, 38-45, & 47 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 43, 51-53, 56-59, 64, 75, & 81 of copending Application No. 11/586,585 (the '585 application). Although the conflicting claims are not identical, they are not patentably

distinct from each other because the claims of the '585 application are species of the instant claims differing only in the addition of limitation concerning water content and the presence of particles in the formulation. Since the claims of the '585 application are in a species relation to the instant claims, the instant claims are anticipated by the claims of the '585 application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

## (10) Response to Argument

Appellant's arguments have been fully considered, but they are not found convincing.

#### Claim Interpretation

Central to the disagreement between appellant and the examiner is the meaning of the limitation that component "(a), (b), and (c) being present in ratios which result in gelling". Appellant argues that this limitation means that the composition forms a gel based on this ratio in the absence of a gelling agent. As an initial matter, the examiner rejects the appellant's use of "gelling" as "(alone) forming a gel". "Gel" when used as a verb means no more than "to thicken". The instant specification supports this interpretation as at page 3, lines 12-14 (the section cited for support when this limitation was added) it states that "a cosmetic formulation comprising at least one antiperspirant active ingredient, at least one  $\alpha$ -hydroxycarboxylic acid and water *gels to afford a transparent, viscous to pasty formulation*" (emphasis added). It is, therefore, entirely consistent with the specification to interpret "being present in ratios which result in

gelling" as "being present in ratios which thicken the composition" and not requiring the formation of a gel as appellant insists.

Further, appellant's disclosure at page 8, lines 5-7 that "[b]y means of the  $\alpha$ -hydroxycarboxylic acids, in particular mandelic acid, and the AP active ingredient - aluminum salt - it is surprisingly possible to produce a hydrogel which has the required properties, such as transparency and low stickiness" demonstrates that the  $\alpha$ -hydroxycarboxylic acid and antiperspirant active ingredient as necessary for the "gelling" described. This disclose coupled with the lack of percentages of water or ratios of water to the other ingredients in the composition, leads one of ordinary skill in the art to conclude that nearly any amount of water combined with the  $\alpha$ -hydroxycarboxylic acid and antiperspirant active ingredient would "result in gelling". The only guidance concerning the amounts of water appears in the examples in the specification; however, there are no such limitations in any claim. It would further be improper for the examiner to incorporate any limitations concerning the amount of water from the specification, especially the examples, into the claims.

## <u>Anticipation</u>

Appellant argues that Williams does not anticipate the claimed invention because Williams incorporates a gelling agent. Appellant argues that "due to the presence of a gelling agent it is reasonable to assume that the composition of Example 9 of WILLIAMS would be a gel even if aluminum chlorohydrex, lactic acid and water are present therein in ratios which (alone) do not result in gelling". First, as the examiner has point out above, "gelling" does not require forming a gel, merely thickening.

Second, as the prior art teaches the same claimed components in the claimed amounts, the prior art and claimed compositions are of identical chemical composition. "Products of identical chemical composition can not [sic] have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties appellant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990) (See MPEP § 2112.01 II). It is, therefore, contrary to appellant's assertion, it is more reasonable to assume that the composition has aluminum chlorohydrex, lactic acid, and water present in ratios which result in gelling than to assume the opposite.

Appellant argues Williams uses a gelling agent to formulate the composition as a gel, whereas the claims require components (a), (b), & (c) to form a gel by themselves. As the examiner has previously stated, this is not the requirements of the claim. The components need only be present in amounts/ratios such that they thicken the composition. Appellant argues that the examples in the instant specification comprise at least 87% water; however, no such limitations are present in the claims, the specification does not at any point state that so much water is necessary in the composition, nor has appellant presented any evidence that the amount of water is crucial to the formulation of the composition. Specifically, appellant argues "that the Examiner has not identified any composition of WILLIAMS that contains components (a), (b) and (c) recited in the rejected claims in concentrations and ratios at least similar to those exemplified in the present specification"; however, it is not the examples which

are examined but the claims, and limitations from the specification are not to be read into the claims. To wit, MPEP 2106 states:

USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim should not be read into the claim. E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily). In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.").

Appellant argues that the examiner has interpreted the claims so broadly as to render the phrase "present in ratios which result in gelling" as meaningless. The examiner disagrees, in that while the examiner is interpreting the claim language broader than appellant argues, he has not treated it as meaningless. Further, given the lack of any direct guidance in the specification as to the amount of water in the composition, the examiner has not interpreted the claims in a way contrary to the disclosure in the specification.

Ultimately the prior art discloses a composition having the same components in the same amounts as <u>claimed</u>. Since products of identical composition cannot have mutually exclusive properties, the prior art composition must be "present in ratios which

result in gelling". Therefore, appellant's arguments are not convincing, and the anticipation rejection should be maintained.

#### Obviousness

Appellant again argues that "present in ratios which results in gelling" means forms a gel, an argument that the examiner has previously rebutted above.

Appellant argues that Guskey teaches that water is undesirable and should be avoided thereby discouraging the presence of water. The examiner does not find this argument convincing. First, while Guskey does teach that the composition "preferably contain less than 5% ... most preferably zero percent by weight of free or added water", this does not constitute a teaching away. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994) Guskey prefers embodiments have little to no water; however, contrary to appellant's assertions, nowhere does Guskey teach water as undesirable or detrimental in the formulation. Secondly, given the lack of any direct guidance in the instant specification and limitations in the claims as to the amount of water in the composition, there is no indication that 5% or less water fails to meet the limitation that the components are "present in ratios which result in gelling". Appellant has not provided any evidence to the contrary.

Appellant argues that Guskey fails to teach the simultaneous use of an antiperspirant active ingredient and an  $\alpha$ -hydroxycarboxylic acid. The examiner does not find this argument convincing as Guskey teaches each ingredient as possible skintreating active agents and teaches that the composition may be formulated with combinations of skin-treating active agents. Hence, the combination is suggested by the prior art. Further, a reason to select mandelic acid from among the  $\alpha$ -hydroxycarboxylic acids is provided by the secondary references of Bhakoo and Hei. Appellant argues that there is no reason to incorporate an antiperspirant and exfoliant ( $\alpha$ -hydroxycarboxylic acid) together as antiperspirant are applied for long periods of time and exfoliants for short periods; however, appellant provides no evidence to support this position, and, further, the reasoning provided by Bhakoo and Hei (i.e. that deodorants function killing the odor-causing microbes and that mandelic acid has antimicrobial properties) certainly overcomes this argument.

Appellant argues that the examiner has not addressed the limitation of transparency. This statement is clearly false, as the examiner pointed out that Guskey teaches that the compositions have reduced visual residue (column 2, lines 19-24). Further, since the prior art and claimed compositions have the same chemical composition, they cannot have mutually exclusive properties.

Appellant argues against Bhakoo and Hei individually, namely that Bhakoo does not teach mandelic acid and Hei does not teach mandelic acid as a deodorant. In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Further, nothing in appellant's arguments contradicts the examiner's findings of fact, namely that deodorants function by killing odor-causing bacteria and that mandelic acid has antibacterial activity.

Appellant argues that the disclosure of Guskey that safe and effective amounts of active agents, the various amounts of actives taught and exemplified in Guskey, and routine experimentation would not result in the claimed concentrations and ratios of actives. The examiner does not find this argument convincing. Generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) Appellant has not provided any evidence that the ranges and ratios claimed are crucial to the invention, and Guskey clearly discloses the general conditions of the claims.

Appellants argue that Guskey teaches zirconium compounds as antiperspirants; however, Guskey does not require zirconium compounds and teaches antiperspirants free of zirconium. Therefore, appellant's arguments are not convincing.

The expected result remains the same; a transparent composition comprising an antiperspirant,  $\alpha$ -hydroxycarboxylic acid and water is made in the absence of evidence

Art Unit: 1613

to the contrary. No unexpected results have been presented. Appellant's arguments are not persuasive, and the rejection under 35 U.S.C. §103(a) should be maintained.

## **Double Patenting**

Since appellant has not traversed the provisional non-statutory obviousness-type double patenting rejections, these provisional rejections should be maintained

### (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/C. R. L./ Examiner, Art Unit 1613 Christopher R. Lea

Conferees:

/Brian-Yong S Kwon/ Supervisory Patent Examiner, Art Unit 1613

/DAVID J BLANCHARD/ Supervisory Patent Examiner, Art Unit 1619